

PTO/SB/08A (10-01)

Approved for use through 10/31/2002 OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	
		Filing Date	
		First Named Inventor	Kia Silverbrook
		Art Unit	
		Examiner Name	
Sheet 1 of 8	Attorney Docket Number	YU183US NP	

U.S. PATENT DOCUMENTS					
Examiner Initials	Cite No. 1	Document Number Number - Kind Code* (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US 5,130,967 *	10.10.2000	Lee et al	
		US 5,675,719 *	10.07.1997	Mátias	
		US 6,229,622 *	05.08.2001	Takeda	
		US 5,719,604 *	02.17.1998	Inui et al	
		US 5,666,141 *	09.09.1997	Matoba et al	
		US 4,672,398 *	06.09.1987	Kuwabara et al	
		US 4,737,802 *	04.12.1988	Mielke	
		US 5,029,805 *	07.09.1991	Albareda et al	
		US 5,258,774 *	11.02.1993	Rogers	
		US 5,553,393 *	11.19.1985	Ruoff	
		US 4,864,624 *	09.12.1989	Gabriel et al	
		US 4,423,401 *	12.27.1983	Mueller	
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS							
Examiner Initials	Cite No.	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T8
		Country Code	Number - Kind Code* (if known)				
		EP	0 713 774 *	05.29.1996	Sharp Kabushiki Kaisha		
		DE	195 16 997 *	11.16.1995	Sharp K.K.		
		DE	196 23 620 *	12.19.1996	Sharp K.K.		
		JP	2-108544 (Abstract) *	04.20.1990	Seiko Epson Corp		
		JP	2-92643 (Abstract) *	04.03.1990	Seiko Epson Corp		
		JP	4-353458 (Abstract) *	12.08.1992	Brother Ind Ltd		
		JP	6-91865 (Abstract) *	04.05.1994	Seikosha Co Ltd		
		JP	6-91866 (Abstract) *	04.05.1994	Seikosha Co Ltd		
		JP	2-265752 (Abstract) *	10.30.1990	Matsushita Electronic Ind Co Ltd		
		EP	0 634 273 *	01.18.1995	Sharp Kabushiki Kaisha		

Examiner Signature	/An Do/	Date Considered	02/17/2009
--------------------	---------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kind's Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

PLEASE NOTE -

* Copies not attached as previously submitted to or cited by the USPTO in parent patent nos US 6,416,167 and US 6,652,052

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /A.D./

PTO/58/08A (10-01)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	
		Filing Date	
		First Named Inventor	Kia Silverbrook
		Art Unit	
		Examiner Name	
Sheet 3 of 8	Attorney Docket Number	YU183US NP	

U.S. PATENT DOCUMENTS					
Examiner Initials ¹	Cite No. ¹	Document Number Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS					
Examiner Initials ¹	Cite No. ¹	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		JP 02 162049 (Abstract) *	06.21.1990	Seiko Epson Corp.	
		DE 32 45 283 *	06.07.1984	Siemens AG	
		JP 04 368851 (Abstract) *	12.21.1992	Seiko Epson Corp.	
		JP 02 158348 (Abstract) *	06.18.1990	Minolta Camera Co Ltd	
		JP 03 112662 (Abstract) *	05.14.1991	Seiko Epson Corp.	
		JP 03.653348 (Abstract) *	03.20.1991	Matsushita Electric Ind. Co	
		EP 0.431.338 *	06.12.1991	Matsushita Electric Ind. Co	
		JP 01 257058 *	10.13.1989	Seiko Epson Corp	
		DE-195-17-969 *	11.30.1995	Sharp K.K	

Examiner Signature	/An Do/	Date Considered	02/17/2009
--------------------	---------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

PLEASE NOTE -

* Copies not attached as previously submitted to or cited by the USPTO in parent patent nos US 6,416,167 and US 6,652,052

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /A.D./

DT05 Rec'd PCT/PTO 05 OCT 2004

PTO/SB/08A (10-01)

Approved for use through 10/31/2002 OMB 0651-0001

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	
		Filing Date	
		First Named Inventor	Kia Silverbrook
		Art Unit	
		Examiner Name	
Sheet 4 of 8	Attorney Docket Number	YU183US NP	

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number - Kind Code* (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code* (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		DE 196 39 717 *	04.17.1997	Sharp K.K.	
		EP 0 737 580 *	10.16.1996	Canon K.K.	
		EP 0 882 590 *	12.09.1998	Canon K.K.	
		EP 0 478 956 *	04.08.1992	Kemforschungs- und Karlsruher GMBH	
		DE 1 648 322 *	03.24.1971	VDO Tachometerwerke GMBH	
		GB 1 428 239 *	03.17.1976	Cibie Projecteurs	
		DE 39 34 280 *	04.26.1990	CAE di Cipelletti Alberto	
		DE 29 05 063 *	08.14.1980	Olympia Werke AG	
		WO 94 18010 *	08.18.1994	Domino Printing Sciences PLC	

Examiner Signature	/An Do/	Date Considered	02/17/2009
--------------------	---------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

PLEASE NOTE -
* Copies not attached as previously submitted to or cited by the USPTO in parent patent nos US 6,416,167 and US 6,652,052

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /A.D./

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTC

(use as many sheets as necessary)

Sheet 5 of 8

Complete if Known

Application Number	
Filing Date	
First Named Inventor	Kia Silverbrook
Art Unit	
Examiner Name	
Attorney Docket Number	YU1831US NP

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.*	Foreign Patent Document		Publication Date MM-DD-YY	Name of Patent or Applicant as Filed Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Y*
		Country Code* (Number)*	KIND Code* (if known)				
		EP 0 392 031 *		11/22/1990	Seiko Epson Corp		
		JP 0 427 291 *		05/15/1991	Seiko Epson Corp		
		JP 01 115639 (Abstract) *		05/08/1989	Ricoh Co Ltd		
		JP 58 116165 (Abstract) *		07/11/1983	Canon K.K		
		EP 0 627 314 *		12/07/1994	Olivetti Canon Ind	SPA	
		JP 61 268453 (Abstract) *		11/27/1986	Olympus Optical Co Ltd		
		EP 04 118241 (Abstract) *		04/20/1992	Seiko Epson Corp		
		EP 0 506 232 *		09/30/1992	Videojet Systems	Int, Inc	
		JP 07 314665 (Abstract) *		12/05/1995	Canon Inc		
		JP 03 180350 *		08/06/1991	Seiko Epson Corp		

Examiner Signature	/An Do/
--------------------	---------

Date Considered

02/17/2009

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.

PLEASE NOTE -

* Copies not attached as previously submitted to or cited by the USPTO in parent patent nos US 6,416,167 and US 6,652,052

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /A.D./

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /A.D./

PTO/SB/DBA (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number

Filing Date

First Named Inventor

Kia Silverbrook

Art Unit

Examiner Name

Attorney Docket Number YU183US NP

Sheet

7

of

8

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.†	Foreign Patent Document Country Code * - Number* - Kind Code * (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Column, Lines, Where Relevant Passages or Relevant Figures Appear	T
		JP 01.306254 (Abstract)	12.11.1989	Seiko Epson Corp		
		EP 0.092.229	10.26.1983	Siemens AG		
		DE 37.16.996	12.08.1988	VDO Schindling		
		DE 34.30.155	02.27.1986	Siemens AG		
		FR 2.231.076	12.20.1974	Electricite De France		
		EP 940975 *	09.08.1999	Seiko Epson Corp		
		EP 899684 *	03.03.1999	Seiko Epson Corp		
		EP 540338	01.28.1998	Canon Kabushiki Kaisha		
		JP 40.4001051 *	01.06.1992	Ricoh Co Ltd		

Examiner
Signature

/An Do/

Date _____

Considered

02/17/2009

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

conformance and not considered. ¹ Please copy on US Form with front cover sheet for examination. ² Applicant's unique citation designation number (optional). ³ See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ⁴ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁵ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁶ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁷ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /A.D./

PTO/SB/08B (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 8

of 8

Complete if Known

Application Number	
Filing Date	
First Named Inventor	Kia Silverbrook
Group Art Unit	
Examiner Name	
Attorney Docket Number	YU183US NP

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country, website number.	T ²
		NOWOROLSKI, J. MARK et al. "Process for in-plane and out-of-plane single-crystal-silicon thermal microactuators". Sensors and Actuators, A, CH, Elsevier-Sequoia S.A., Lausanne, Vol 55, no. 1, 15 July 1996, pp 65-69, XP004077979 ISSN: 0924-4247.	
		ATAKA, MANABU et al; "Fabrication and Operation of Polyimide Bimorph Actuators for Ciliary Motion System". Journal of Microelectromechanical Systems, US, IEEE Inc. New York, Vol. 2, no. 4, 1 December 1993, pp 146-150, XP000443412, ISSN: 1057-7157.	
		YAMAGATA, YUTAKA et al, "A Micro Mobile Mechanism Using Thermal Expansion and its Theoretical Analysis". Proceeding of the workshop on micro electro mechanical systems (MEMS), US, New York, IEEE, Vol. Workshop 7, 25 January 1994, pp 142-147, XP000528408, ISBN: 0-7803-1834-X.	
		Derwent Abstract Accession No. 2001-020348/03, Class P75; T01, JP 2000-293335 A (SEIKO EPSON CORPORATION) 20 October 2000.*	
		Derwent Abstract Accession No. 98-081618/08, Class W02, JP 09-314915 A (CANON KABUSHIKI KAISHA) 9 December 1997.*	

Examiner
Signature

/An Do/

Date
Considered

02/17/2009

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.